Client Story

National Restaurant Chain Commits to Data Modernization

When a divestiture-driven migration left a nationally recognized chain restaurant with fractured data and inconsistent reporting, Insight built a modern data pipeline to establish a single source of truth for greater accuracy and reduced operational costs

When, after more than 70 years in business, a well-known restaurant chain split into two separate brand entities, the result was a range of fractured tool sets and expiring licenses. Leaders determined it was time to make the shift from their legacy systems to a cloud-based solution through Azure® and Power BI®.

The migration would impact data and reporting across the organization — from Point-of-Sale (POS) systems to HR, Enterprise Resource Planning (ERP), Customer Relationship Management (CRM) and financial reporting systems.

Two outside consulting companies supported the initial migration, but a series of tight deadlines drove short-term-oriented solutions. The results served immediate reporting needs, but ultimately resulted in a siloed data environment.

Opportunities for optimization arise.

Toward the end of the project, Insight was brought on to provide staff augmentation services, helping address gaps in the internal IT team during the ongoing reporting migration efforts.

Our team of architects and developers recognized opportunities to optimize the restaurant chain's data and analytics environment by implementing additional tool sets and leveraging cloud best practices. They recommended a second phase of the migration initiative to fully modernize the data pipeline.

Leaders within the organization agreed to their ongoing challenges with reporting accuracy and performance, and Insight was selected as the preferred partner in navigating the journey to data modernization.

> *Insight teammates recognized opportunities to optimize the restaurant chain's data environment by implementing additional tool sets and leveraging cloud best practices.*

Industry:

Restaurant

The challenge:

Shift from fractured legacy systems and highly manual processes to a modern cloud-based data pipeline

The solution:

A new data ingestion pipeline that integrates disconnected systems, leading to more accurate reporting, increased visibility into key metrics and reduced costs

Insight provided:

- Strategy for a second phase data migration
- Construction of a data ingestion pipeline
- Scalable data architecture
- Foundation for ongoing data transformation
- Training for the client's IT team

Insight services:

- Consulting Services
- Professional Services

Modernizing architecture to tackle challenges

As the Insight team worked with the restaurant chain, three challenges became clear. First, the rapid migration had left the organization with several disparate sources of data. Second, manual collection and aggregation processes were prone to human error and made it nearly impossible for employees to generate accurate reports. And finally, to curb the high costs of database storage, the IT team relied on frequent data erasure, which resulted in inaccurate historical data.

To address these challenges, the decision was made to consolidate data and optimize reporting using a data lake and modern data warehouse model. Insight immediately began transforming the organization's data architecture and consolidating the various sources into a singular ingestion pipeline.

The client had an existing data lake, but usage was limited to one or two specific processes, and it lacked the containerization needed to support broader reporting. Insight helped redefine the layers of the data lake to meet the new requirements. This new architecture provided a more cost-effective solution for data storage and cleansing.

An enterprise data warehouse was then established in Azure as the central repository for current and historical data, enabling users to generate reports more easily and accurately. Azure Databricks was selected as the preferred Extraction, Transformation and Loading (ETL) tool used to pull data from disparate sources into the consolidated ingestion layer. Performance testing against a pure Azure Data Factory (ADF) ETL solution revealed Databricks had the performance benefits required to meet the client's Service-Level Agreements (SLAs).

Insight teammates also built out an auditing log to capture record counts and load times at each step of the ingestion process. This was an entirely new capability that would enable the client's IT team to identify discrepancies and pinpoint issues from day to day.

> *By replacing the outdated approach to database storage with a more flexible, scalable data architecture, the client has reduced operational costs by more than $13,000 per month.*

Over the course of six months, Insight completed the development of the modern data ingestion pipeline that served as a high-performance, cost-effective alternative to the restaurant chain's legacy system. The new architecture successfully broke down data silos, eliminated the need for manual processes and increased visibility into historical reporting, empowering the company to better track changes year over year and inform future decision-making.

Increased efficiency at a lower cost

The new data environment has enabled significant developments in analytics. As a result, the restaurant chain now has unprecedented visibility into key financial and customer metrics, including guest wait times, food preparation times, incident reports and overall sales. It has also laid the groundwork for integration with online ordering and delivery services.

Additionally, by replacing the outdated approach to database storage with a more flexible, scalable data architecture and consolidating Azure resources, the client has reduced operational costs by more than $13,000 per month.

Insight has maintained an ongoing relationship with the client's leadership team, continuing discussions around areas of potential support, including ongoing enhancements to the data environment, managed services and analytics.

Benefits & outcomes:

Centralized data ingestion for more accurate reporting

Streamlined, cost-effective solution for historical reporting

Ongoing optimizations enabled **through a new auditing log**

Reduced operational costs by

$13,000/month

Unprecedented visibility **into key financial and customer metrics**

Eliminated need for manual processes